



Office of the General Auditor —

General Auditor's Business Plan for FY 2023/24

July 11, 2023



Executive Summary

Background

The mission of the Office of the General Auditor is to provide independent, professional, and objective assurance and consulting services designed to add value and improve Metropolitan's operations. We help Metropolitan accomplish its objectives by using a proactive and systematic approach to evaluate and recommend improvements to the effectiveness of risk management, internal control, and governance processes.

Professional internal audit standards require we establish a risk-based plan to determine the priorities of our office that are consistent with Metropolitan's goals and objectives. Our methodology will be to perform focused audits and provide advisory services that evaluate important areas of Metropolitan and provide timely results.

We completed an audit risk assessment by gaining an understanding of Metropolitan's business operations through documentation reviews, interviews with management, and discussions with the Board. The results facilitated our efforts to identify and measure risks and prioritize potential audits and advisory projects for the Audit Plan. Our approach is to provide coverage of the most important aspects of the areas identified. We may make exceptions to this approach when there are carryforward audits from the prior year, where there has been recent audit coverage, or if our professional judgment dictates otherwise.

Results

Our fiscal year 2023/24 Audit Plan includes **23** scheduled audits, including seven new and 16 carried forward audits from fiscal year 2022/23. Additionally, we plan to cover six advisory projects.

Our audit risk assessment identified opportunities for our office to provide audit or advisory services in the following areas:

- Power Operations & Planning
- Human Resources
- Cybersecurity
- Business Continuity
- Water Conveyance & Distribution
- Administrative Services
- Sustainability, Resilience, and Innovation
- Board of Directors
- Revenue & Budget

Due to limited staffing resources, our Audit Plan includes projects addressing the highest identified audit risk areas. If resources become available in fiscal year 2023/24, we will incorporate additional risk areas into the Audit Plan. While we will re-evaluate the audit risk assessment periodically during the fiscal year, any risk areas not incorporated into the Audit Plan by fiscal year-end will be re-evaluated for inclusion in our fiscal year 2024/25 Audit Plan.

Diamond Valley Lake, pictured in spring 2023, proved to be the cornerstone of Metropolitan's supply reliability during times of drought. The reservoir provided water to meet demands by being drawn down and now will receive surplus supplies from the State Water Project as they become available.



THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

Date: July 11, 2023

To: Adán Ortega, Jr., Board Chair
Members of the Board of Directors

From: Scott Suzuki, CPA, CIA, CISA, CFE, General Auditor *S Suzuki*

Subject: General Auditor's Business Plan for Fiscal Year 2023/2024

The Office of the General Auditor is pleased to present our Business Plan for fiscal year 2023/24 in accordance with Metropolitan Administrative Code Section 2703 and International Standards for the Professional Practice of Internal Auditing issued by The Institute of Internal Auditors.

The Business Plan is the result of careful analysis of Metropolitan documents and data, numerous risk discussions with Metropolitan managers, and Board input on specific risks and internal control concerns.

Our office is charged with determining whether Metropolitan's network of risk management, internal control, and governance processes are designed effectively and functioning as intended by management. To execute this charge, we plan to perform a series of audits and advisory projects, 29 in total, during the fiscal year 2023/24 (23 audit projects and six advisory projects).

The last several years have brought extraordinary challenges for Metropolitan staff due to fluctuating weather conditions, climate whiplash, and an unprecedented pandemic. In many cases, these events have altered how we perform our business and have forced Metropolitan to adjust and innovate how we deliver on our core mission.

Our mission is to add value by recommending improvements to Metropolitan's operations while maintaining transparency and trust in the work we perform. We will do this by working collaboratively with all levels of the Metropolitan team and identifying risks and opportunities that evolve under our changing environment, which will contribute to ensuring Metropolitan's resources have the maximum impact on the communities and the member agencies we serve.

We appreciate the opportunity to serve Metropolitan by offering independent, professional, and objective audit and advisory services and appreciate the cooperation provided by the Metropolitan team during our audit risk assessment project.

If you have any questions regarding our business plan, please do not hesitate to contact me directly at 213.217.6528 or Deputy General Auditor Kathryn Andrus at 213.217.7213.

Attachments

Other report recipients:
General Manager
General Counsel
Ethics Officer
Board Executive Officer
External Auditor

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BUSINESS PLAN

DEPARTMENT OVERVIEW

The General Auditor provides independent, professional, and objective advice to the Board and Metropolitan management in accordance with the professional standards issued by The Institute of Internal Auditors. To maintain independence, the General Auditor reports directly to the Board through the Finance, Audit, Insurance, and Real Property Committee.

The goal of the General Auditor is to assist Metropolitan's Board and management in improving business and financial practices. To carry out this effort, the General Auditor oversees a team of audit professionals who determine whether Metropolitan activities, programs, or agreements comply with policies, procedures, and applicable regulations. The team proactively addresses issues, focusing on risk management, internal control, and governance processes.

Towards this goal, our office is charged with determining if Metropolitan's network of risk management, internal control, and governance processes (as designed and represented by management), are adequate and functioning in a manner to ensure:

- ◆ Risks are appropriately identified, managed, and monitored.
- ◆ Significant financial, managerial, and operating information is accurate, reliable, and timely.
- ◆ Employees' actions comply with policies, standards, procedures, and applicable laws and regulations.
- ◆ Resources are acquired economically, used efficiently, and adequately protected.
- ◆ Programs, plans, and objectives are achieved.
- ◆ Quality and continuous improvement are fostered in Metropolitan's control process.
- ◆ Significant legislative or regulatory issues are recognized and addressed appropriately.

Our office carries out its responsibilities in accordance with the Audit Department Charter specified in the Metropolitan Administrative Code Section 6451.



STRATEGIC GOALS

Our strategic goals for FY 2023/24 are:

- ◆ Build and strengthen relationships with the Finance, Audit, Insurance, and Real Property Committee and the 38-member Board of Directors by developing trust and establishing credibility and reliability.
- ◆ Initiate robust risk conversations with the Subcommittee on Audits and the Board.
- ◆ Develop and execute an annual Audit Plan that is bold, strategic, and addresses any outstanding audit recommendations, along with timelines for implementation.
- ◆ Strengthen the operations of the organization by providing independent and objective advice in accordance with The Institute of Internal Auditors' International Standards for the Professional Practice of Internal Auditing.
- ◆ Take steps toward creating a high-performing, inclusive, and innovative team of audit professionals noted for valuing diversity, workplace equity, shared vision, and mission.



AUDIT RISK ASSESSMENT

AUDIT RISK ASSESSMENT PROCESS

The General Auditor's objective is to add value and improve Metropolitan's effectiveness and efficiency.

Our strategy to accomplish this is through planning, nimble responsiveness, aligning our priorities with Metropolitan's objectives, and auditing the risks with the greatest potential to affect Metropolitan's ability to achieve its objectives.

The chief audit executive must establish a risk-based plan to determine the priorities of the internal audit activity, consistent with the organization's goals – International Professional Practices Framework (IPPF) Standard 2010

There are eight primary steps in performing and maintaining the audit risk assessment and Audit Plan:

1. Understand the organization.
2. Identify, assess, and prioritize risks.
3. Coordinate with other assurance providers.
4. Estimate resources.
5. Propose the plan and solicit feedback.
6. Finalize and communicate the plan.
7. Assess risks continuously.
8. Update plan and communicate updates.

The General Auditor team developed the Audit Plan using this process, which is designed to ensure a thorough and comprehensive risk evaluation; facilitate effective communication with the Board, management, and other stakeholders; and allocate sufficient resources to perform the planned projects.

As part of identifying, assessing, and prioritizing risks, we looked at the following risk factors:

Impact Factors

1. Loss/Material Exposure. Dollar values at risk, annual expenses, number of transactions, impact on other areas of Metropolitan, degree of reliance on IT.
2. Strategic Risk. Public perception/reputation, economic conditions, volatility, significance to the General Manager's business plan/strategy, degree of regulation, recent changes.



Likelihood Factors

3. Control Environment. Degree of process isolation, degree of formalization, newness of processes/applications, third-party reliance, management turnover, management monitoring, policy and procedures.
4. Complexity. Degree of automation, degree of required specialization, level of technical detail, complexity of structure, frequency of change.
5. Assurance Coverage. Type of engagement, other reviews, second-line coverage, current audit/follow-up.
6. Board & Management Concern. Quantity and specificity of concerns shared during interviews and meetings.

Speed Factor

7. Velocity. How fast a risk can affect Metropolitan.

We obtained input from management in key business areas to identify and quantify the risks Metropolitan faces. We also looked at goals and objectives laid out in various Metropolitan documents, including the financial statements, annual reports, the Integrated Resources Plan, the Climate Action Management Plan, monthly General Manager reports, Board and Committee meeting agendas and minutes, and the biennial budget.

Our audit universe was defined as 35 auditable units and generally evolved around functional areas of Metropolitan. All Metropolitan departments, groups, sections, and units are included as auditable units except for our office. We scored each factor and sorted each auditable unit according to a total risk score to identify auditable units with higher audit risks.

An auditable unit with a higher audit risk score indicates the services or functions it is responsible for are a higher risk activity because of factors including, but not limited to, having a large amount of expenditures and/or revenues, having a high level of liquid assets such as cash, undergoing significant change (e.g., organizational structure, business process, IT), processing complex transactions, or having a high degree of public interest. A higher audit risk score indicates that if something were to go wrong, it could have a greater impact on Metropolitan.



AUDIT RISK ASSESSMENT SUMMARY

Our audit risk assessment results show that five auditable units are considered higher risk, 24 moderate risk, and six lower risk. Below are Metropolitan’s auditable units in their respective risk categories in alphabetical order.

HIGHER AUDIT RISK

- Business Continuity
- Cybersecurity
- Human Resources
- Power Operations & Planning
- Water Conveyance & Distribution

A higher audit risk score DOES NOT mean that a business area/process is being managed ineffectively or that internal control is not adequate.

MODERATE AUDIT RISK

- Administrative Services
- Bay Delta Initiatives
- Board of Directors
- Diversity, Equity, and Inclusion
- Employee Relations
- Engineering Planning
- Environmental Planning
- Equal Employment Opportunity
- External Affairs
- Information Technology
- Infrastructure Reliability & Program Management (PM)
- Office of the General Manager
- Operational Safety & Regulation
- Operations Support
- Real Property
- Revenue & Budget
- Security
- Sustainability, Resilience, and Innovation
- Treasury & Debt Management
- Water Operations & Planning
- Water Quality
- Water Resource Implementation
- Water Resource Planning
- Water Treatment

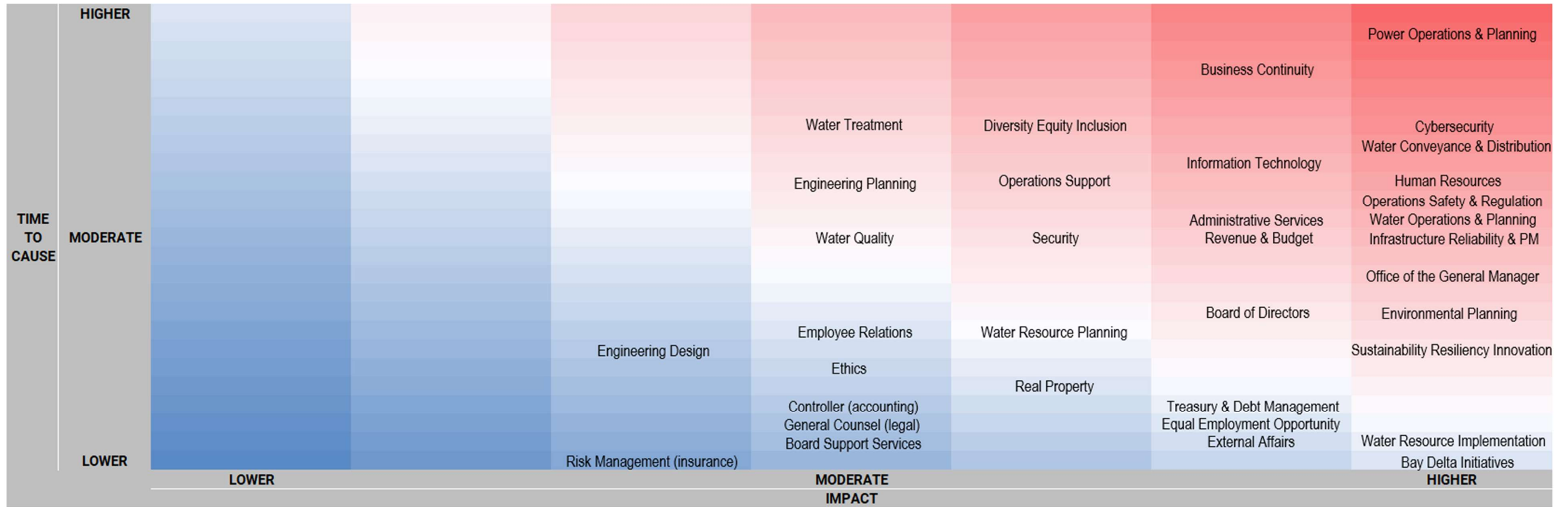
LOWER AUDIT RISK

- Board Support Services
- Controller (accounting)
- Engineering Design
- Ethics
- General Counsel (legal)
- Risk Management (insurance)



HEAT MAP

The diagram below shows the relationship between time to cause (likelihood + velocity) vs. impact for each Metropolitan auditable area.



AUDIT PLAN

SERVICE PORTFOLIO

Our core portfolio includes the following services:

1 Operational & Compliance Audits

These projects provide assurance focusing on internal control design, implementation, and/or maintenance in core business operations. The criteria used for our internal control audits is the Committee of Sponsoring Organizations of the Treadway Commission (COSO) internal control framework. Projects can also include an assessment of policy, contractual, and/or regulatory compliance.

2 Information Technology Audits

Information technology is pervasive in Metropolitan's system of internal control. These projects focus on general information technology controls (e.g., user access, change management, business continuity) or specialized cybersecurity controls (e.g., IT asset management, data protection, malware defense).

3 Advisory Services

These projects include providing consulting services to Metropolitan functions primarily in support of major business changes (e.g., new application implementation, re-organization, new service line); however, they can also include ad-hoc on-demand advice.

4 Follow-Up Reviews

Follow-up reviews of observations from prior audits to monitor the implementation progress of recommended corrective actions. The amount of follow-up necessary depends on the severity of the issue and the type of corrective action.

5 Administration & Other Activities

These include the annual audit risk assessment and audit plan; TeamMate+ training and implementation; on-demand advisory services; annual reporting; quality assessment & improvement program; and contractually required assistance to external auditors.



PLANNED ENGAGEMENTS

Planned engagements are based upon approximately 12,700 productive hours provided by nine audit professionals with time allocated for administrative duties. Audit hours for the general auditor and deputy general auditor are not included in the productive hour total. Higher audit risk areas are given priority for project assignment over moderate and lower audit risk areas. Once all higher audit risk areas are assigned an audit, additional moderate audit risk areas are selected at the discretion of the General Auditor. Projects may also be assigned based on Board direction or as mandated by law/regulation. Lastly, recurring audits are generally not assigned unless determined as higher risk or mandated by law/regulation.

The following table provides planned audit and advisory engagements and includes preliminary objectives and project budgeting:

SUBJECT	PRELIMINARY SCOPE	PRELIMINARY BUDGET
Operational & Compliance Audits		
1. Power Purchasing	Review Metropolitan power purchases	200
2. State Audit Monitoring	Review implementation status of State Auditor recommendations	200
3. Recruiting	Review recruiting procedures and technology	800
4. Water Supply Disaster Preparedness & Business Continuity	Review Metropolitan's planned response to water supply interruption	800
5. CRA Maintenance	Review conveyance maintenance program/processes	800
6. Data Governance	Review Metropolitan's data governance strategy	800
7. Reserves/Rate Stabilization Fund <i>Board Directed from FY 2022/23</i>	Determine if reserves are maintained in accordance with Metropolitan Administrative Code	400
8. Fallowed Land <i>Board Directed from FY 2022/23</i>	Determine if contracted fallowed land acreage agrees to actual fallowed land acreage	400
9. Project Controls & Reporting System (PCRS) <i>Carryforward from FY 2022/23</i>	Review administration of the Project Controls and Reporting System.	200



Operational & Compliance Audits (con't)

10. Real Property Business Management System <i>Carryforward from FY 2022/23</i>	Review administration of Real Property Business Management System Project.	200
11. Fuel Regulations Compliance <i>Carryforward from FY 2022/23</i>	Review compliance with regulations and policies.	200
12. Surplus Personal Property – Equipment <i>Carryforward from FY 2022/23</i>	Review retirement and disposal of surplus equipment and property.	160
13. Employee Tuition Reimbursement Program <i>Carryforward from FY 2022/23</i>	Review reimbursements for policy compliance.	80
14. CRA Discharge Line Isolation Couplings <i>Carryforward from FY 2022/23</i>	Review administration of the CRA Discharge Line Isolation Couplings Project	40
15. IBI Group <i>Carryforward from FY 2022/23</i>	Review administration of the consulting agreement.	40
16. Kennedy/Jenks Consultants, Inc. <i>Carryforward from FY 2022/23</i>	Review administration of the consulting agreement.	40
17. PlanNet Consulting, LLC <i>Carryforward from FY 2022/23</i>	Review administration of the consulting agreement.	40
18. 1Cyber Security Resources (CSR), Inc. <i>Carryforward from FY 2022/23</i>	Review administration of the consulting agreement.	40
19. ResourceXperts <i>Carryforward from FY 2022/23</i>	Review administration of the consulting agreement.	40
20. Website Design & Implementation <i>Carryforward from FY 2022/23</i>	Review internal controls over site design and implementation.	40



Information Technology Audits

21. Cybersecurity: Inventory & Control of Enterprise Assets	Determine if an enterprise asset inventory is established and maintained.	400
22. Oracle Application Security <i>Carryforward from FY 2022/23</i>	Assess Oracle security controls.	80
23. Cybersecurity – Ransomware <i>Carryforward from FY 2022/23</i>	Evaluate ransomware preparedness.	40

Advisory Services

24. Risk Oversight Committee	To advise on committee matters.	NA
25. Grants	To advise on the new grants management function.	200
26. Board Expense Policy	To advise on Board expense policy.	200
27. WINS (Water Information Network System)	To advise on new application implementation.	80
28. SCADA (Supervisory Control and Data Acquisition)	To advise on new application implementation.	80
29. PeopleSoft Time & Labor	To advise on new application implementation.	80

Follow-Up Reviews

Follow-Up on Operational & Compliance Audits	Follow-up on management's implementation of our audit recommendations.	810
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Administration & Other Activities

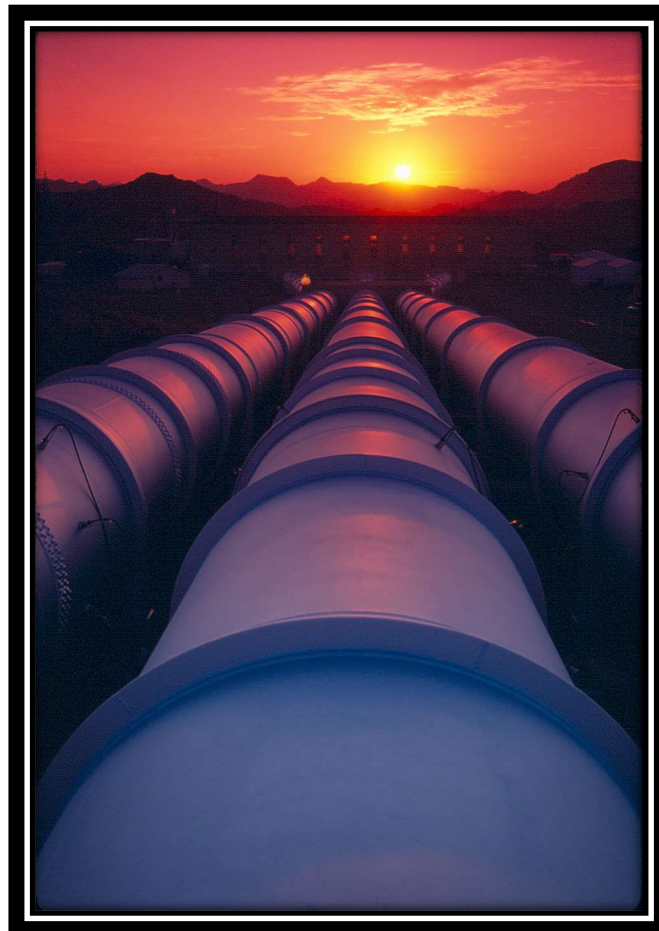
External Audit Support	800
Annual Audit Risk Assessment & Audit Plan	360
Quality Assessment & Improvement Program	200
TeamMate+ Training & Implementation	200
On-Demand Advisory Services	80
Annual Report	40



The General Auditor’s Audit Plan is subject to change for such events where the General Auditor assesses it is warranted to substitute, postpone, or cancel a scheduled audit due to timing, priority, resources, and/or other risk considerations. Such modifications will be noted in the periodic status reports submitted to the Subcommittee on Audits. The acceptance of the status reports authorizes any changes noted and amends the Audit Plan.

PROJECT TEAM

- ◆ Kathryn Andrus, CPA, Deputy General Auditor
- ◆ Chris Gutierrez, Audit Program Manager
- ◆ Arturo Castro, Principal Auditor
- ◆ Sherman Hung, CISA, Principal Auditor
- ◆ Andrew Lin, CPA, CIA, CIGA, Principal Auditor
- ◆ Leo Roldan, CPA, CIA, CGMA, Principal Auditor
- ◆ Lina Tan, Principal Auditor
- ◆ Neena Mehta, Senior Deputy Auditor
- ◆ Bonita Leung, CPA, CIA, CRMA, CGMA, Deputy Auditor III
- ◆ Faviola Sanchez, Deputy Auditor III



APPENDIX A: ADDITIONAL INFORMATION

ASSURANCE COVERAGE

Specific risks identified as part of the audit risk assessment process are mapped to their associated auditable areas, and resultant planned engagements (planned engagement number) or internal audit methodology as shown below:

RISK	AUDITABLE AREA	ENGAGEMENT/ METHODOLOGY
Power costs	Power Operations & Planning	Power Purchasing (1) Risk Oversight Committee (advisory) (24)
State Audit status	Human Resources	State Audit Monitoring (2)
Recruiting	Human Resources	Recruiting (3)
Cybersecurity	Cybersecurity	Cybersecurity: Inventory & Control of Enterprise Assets (21)
Earthquake, Delta failure	Business Continuity	Water Supply Disaster Preparedness & Business Continuity (4)
Water system maintenance	Water Conveyance & Distribution	CRA Maintenance (5)
Data classification	Administrative Services	Data Governance (6)
Grant compliance	Sustainability, Resilience & Innovation	Grants (advisory) (25)
Board governance	Board of Directors	Board Expense Policy (advisory) (26)
Reserves	Revenue & Budget	Reserves/Rate Stabilization Fund (7)
Cost savings/culture	NA	Efficiency/Economy Project Objectives



Specific risks identified as part of the audit risk assessment process are mapped to auditable areas and will be added to the Audit Plan as resources become available:

RISK	AUDITABLE AREA
Chemical safety	Water Treatment
California Air Resources Board regulation compliance/readiness	Operations Support
Asset management	Infrastructure Reliability & Program Management
Enterprise risk management	Office of the General Manager
Property protection, trespassing	Security
Desert housing, leases/revenue, permits	Real Property

Additionally, essential cybersecurity topics that will not be covered due to resource limitations are:

- Software asset inventory and control.
- Enterprise asset and software configuration.
- Account management.
- Access control management.
- Continuous vulnerability management.
- Audit log management.
- E-mail and web browsing protection.
- Malware defense.
- Network infrastructure.
- Security awareness.
- Service provider management.
- Incident response management.



RESOURCE PLAN

The department is comprised of 11 professional audit team members and one administrative professional. Team member audit experience includes financial, operational, compliance, performance, fraud, and information technology. Five members are licensed Certified Public Accountants (CPA), four are Certified Internal Auditors (CIA), and two are Certified Information System Auditors (CISA). Other professional certifications held include Certified Fraud Examiner (CFE), Chartered Global Management Accountant (CGMA), Certification in Risk Management Assurance (CRMA), and Certified Inspector General Auditor (CIGA).

The total productive hours available for portfolio services is 12,698 hours after allowances for benefits and non-productive time (e.g., training, staff meetings, HR activities). Additional time is then deducted for administration and other activities, a contingency reserve, a supplemental training initiative, Board requests, and special projects, resulting in 7,718 hours available for audit and advisory projects.

While all five higher-risk auditable areas are covered by existing team resources, a number of cybersecurity areas (see page 13 above) WILL NOT be covered by internal resources. Our office will investigate additional staffing, co-sourcing, or outsourcing opportunities to cover these important technical areas.

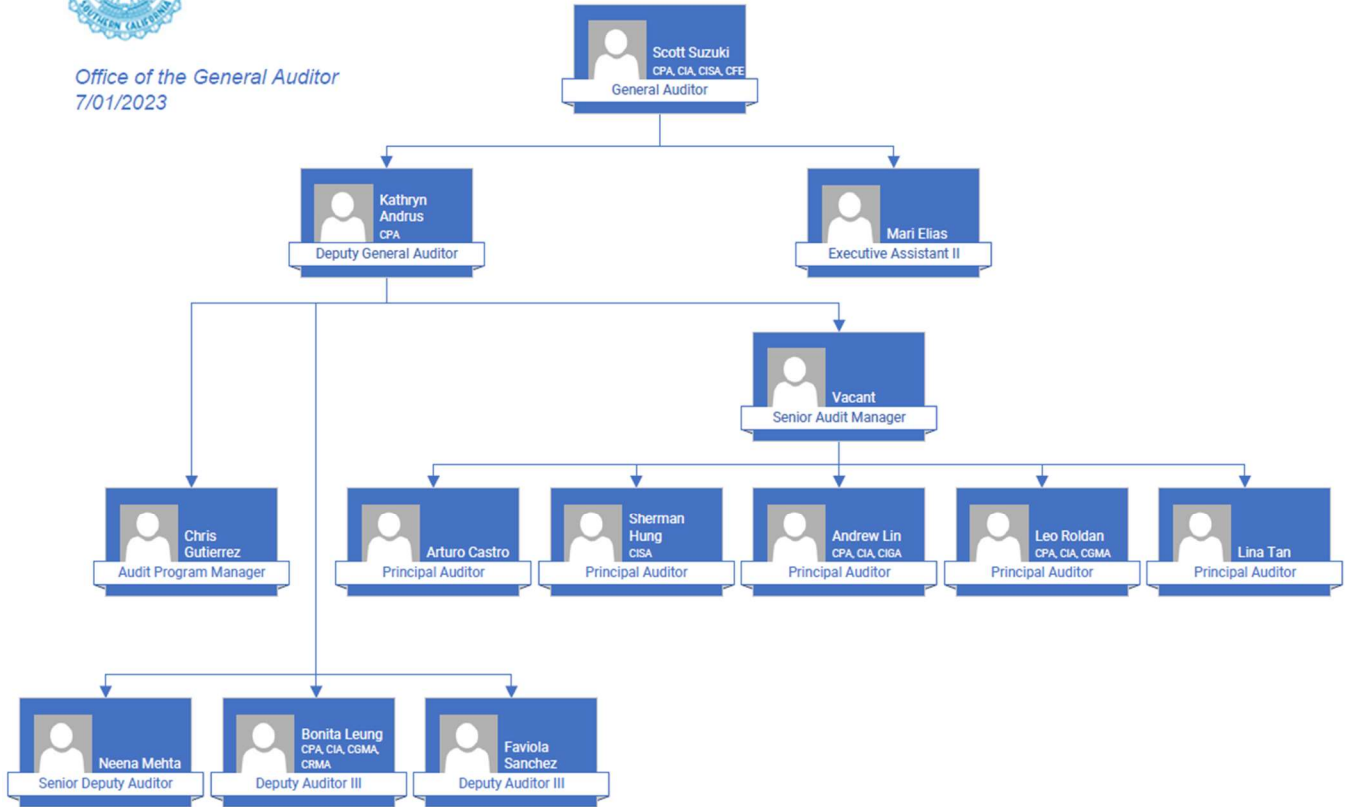


ORGANIZATION CHART



THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

Office of the General Auditor
7/01/2023



STANDARDS

The following are references to conformance with relevant International Professional Practices Framework (IPPF) standards.

2010 – Planning

The chief audit executive must establish a risk-based plan to determine the priorities of the internal audit activity, consistent with the organization's goals.

- The internal audit activity's plan of engagements must be based on a documented risk assessment, undertaken at least annually. The input of senior management and the Board must be considered in this process.
- The chief audit executive must identify and consider the expectations of senior management, the Board, and other stakeholders for internal audit opinions and other conclusions.
- The chief audit executive should consider accepting proposed consulting engagements based on the engagement's potential to improve management of risks, add value, and improve the organization's operations. Accepted engagements must be included in the plan.

2020 – Communication & Approval

The chief audit executive must communicate the internal audit activity's plans and resource requirements, including significant interim changes, to senior management and the Board for review and approval. The chief audit executive must also communicate the impact of resource limitations.

2100 – Nature of Work

The internal audit activity must evaluate and contribute to the improvement of the organization's governance, risk management, and control processes using a systematic, disciplined, and risk-based approach. Internal audit credibility and value are enhanced when auditors are proactive and their evaluations offer new insights and consider future impact.



2110 – Governance

The internal audit activity must assess and make appropriate recommendations to improve the organization's governance processes for: (1) making strategic and operational decisions, (2) overseeing risk management and control, (3) promoting appropriate ethics and values within the organization, (4) ensuring effective organizational performance management and accountability, (5) communicating risk and control information to appropriate areas of the organization, (6) coordinating the activities of, and communicating information among the Board, external and internal auditors, other assurance providers, and management.

- ◆ The internal audit activity must evaluate the design, implementation, and effectiveness of the organization's ethics-related objectives, programs, and activities.
- ◆ The internal audit activity must assess whether the information technology governance of the organization supports the organization's strategies and objectives.

2120 – Risk Management

The internal audit activity must evaluate the effectiveness and contribute to the improvement of risk management processes.

- ◆ The internal audit activity must evaluate risk exposures relating to the organization's governance, operations, and information systems regarding the: (1) Achievement of the organization's strategic objectives; (2) Reliability and integrity of financial and operational information; (3) Effectiveness and efficiency of operations and programs; (4) Safeguarding of assets; and (5) Compliance with laws, regulations, policies, procedures, and contracts.
- ◆ The internal audit activity must evaluate the potential for the occurrence of fraud and how the organization manages fraud risk.
- ◆ During consulting engagements, internal auditors must address risk consistent with the engagement's objectives and be alert to the existence of other significant risks.
- ◆ Internal auditors must incorporate knowledge of risks gained from consulting engagements into their evaluation of the organization's risk management processes.
- ◆ When assisting management in establishing or improving risk management processes, internal auditors must refrain from assuming any management responsibility by actually managing risks.



2130 – Control

The internal audit activity must assist the organization in maintaining effective controls by evaluating their effectiveness and efficiency and by promoting continuous improvement.

- ◆ The internal audit activity must evaluate the adequacy and effectiveness of controls in responding to risks within the organization’s governance, operations, and information systems regarding the: (1) Achievement of the organization’s strategic objectives; (2) Reliability and integrity of financial and operational information; (3) Effectiveness and efficiency of operations and programs; (4) Safeguarding of assets; (5) Compliance with laws, regulations, policies, procedures, and contracts.
- ◆ Internal auditors must incorporate knowledge of controls gained from consulting engagements into evaluation of the organization’s control processes.

